RANCHO SANTA ANA BOTANIC GARDEN

LEAFLETS
of
POPULAR INFORMATION

No. 33 May, 1940

BACCHARIS PILULARIS
PROSTRATE COYOTE-BRUSH

Prepared
by
RANCHO SANTA ANA BOTANIC GARDEN
of the
NATIVE PLANTS OF CALIFORNIA

Santa Ana Canyon
Orange County
California

No. 33 May 31, 1940

BACCHARIS PILULARIS
PROSTRATE COYOTE-BRUSH

Compositae Sunflower Family

Evergreen shrub forming a low mat 6 to 15 ft. across, 6 to 24 in. high. Branches flexible, seldom over ¾ in. in diam., rooting sparingly where touching the ground. Leaves alternate, dark green or slightly glaucous, ½ to ¾ in. long, obovate, oval or obtuse, with about 5 coarse teeth. Plants dioecious (staminate and pistillate flowers borne on separate plants). Heads of the inflorescence numerous, aggregated at the ends of the leafy branchlets. Involucres ovoid or cylindric, with 25 to 35 well imbricated bracts, these spreading after anthesis and somewhat scarious, containing 20-50 flowers. Staminate heads about 3/16 in. high; flowers with greenish-yellow corollas, the 5 petal lobes spreading and recurved; stamineal column yellow; pappus dull straw color, about 1/8 in. long; achenes abortive. Pistillate heads about ¼ in. high; corolla slender, teeth erect; pappus copious, shiny white, exceeding the style in anthesis, in seed very showy, often 5/16 in. long; achenes glabrous, light brown, 10-nerved. Flowers appear in September and October; the seeds mature within a few weeks and are widely scattered by the wind.

The species of the genus Baccharis (the name refers to the ancient god, Bacchus) number about 300 and are all confined to the New World. They are dioecious, insect pollinated members of the tribe Asterae of the family Compositae. In California there are about 9 species, most of which are regarded as somewhat weedy shrubs or perennials. One of these (B. viminea) has been used very extensively for erosion control in recent years.

Baccharis pilularis (the species name meaning pill-like or gland-like is in reference to the leaves) was described in 1836 by De Condolle, famous European botanist, upon specimens collected by David Douglas, Scotch explorer in California, who obtained his material either at San Francisco or Monterey. Douglas also collected specimens of an erect shrub at the same time which De Condolle described as B. consanguinea. Most botanists have included both of these plants under the name pilularis, but on the basis of 10 years of experimental work at this institution the two forms appear to be distinct entities and are regarded as subspecies with the name B. pilularis typica used to designate the prostrate plant and the name B. pilularis consanguinea used to designate the erect and much more common shrub. The Prostrate

Coyote--Brush (subspecies typica) is confined to the immediate coast from Pt. Sur, Monterey Co. to a short distance north of the Russian River, Sonoma Co., where it generally grows in sand or sandy loam on the coastal bluffs.

Since many prostrate plants found on exposed ocean bluffs are merely "wind-trimmed" our first experiments were to determine if this plant would breed true. Seeds gathered from San Mateo Co. in 1930 and from San Francisco in 1931 yielded hundreds of plants, none of which was erect, although a few grew to over 2 ft. in height, but these were considered to have been crosses with the erect subspecies consanguinea. Many fine prostrate plants were produced which soon spread out into mats 6 to 12 ft. across. Both staminate and pistillate plants made excellent mats, but the copious pappus on the seeds of the latter was objectionable so these plants were removed. The strain from San Mateo produced plants with slightly larger leaves and so later selected propagations by cuttings have been from staminate plants of it. As a result, we have now obtained an excellent ground cover plant, dark green in color at all seasons, free from insect pests and disease, low in water requirements and able to thrive even in heavy adobe soils.

Propagation from seeds is easy if they are planted in the late fall or early spring in outside seed boxes or beds. The young seedlings are readily transplanted to containers and within a few months can be set out in the spots desired. If planted thickly the pistillate and less prostrate plants can be removed after a couple of seasons and the remaining plants will quickly fill in the intervening spaces. However, where a very uniform low mat is desired the plants should be grown from cuttings taken from selected staminate plants. Cuttings taken in the spring will root readily in sand, after which they should be potted up in a good rich soil and held until of sufficient size for planting. Although the plants will survive with little or no irrigation, they really grow better if watered regularly at intervals of 2 to 3 weeks during the summer and less frequently at other seasons.

The search for suitable ground cover plants for California gardens has resulted in the use of many different plants, but thus far no one plant appears to thrive under all conditions. The Prostrate Coyote-Brush appears to have merit, but is not suggested as the one best ground cover, but merely as a plant which has been thoroughly tested at this Garden for 10 years and which should be given consideration.

RANCHO SANTA ANA BOTANIC GARDEN

Of The Native Plants of California.

Established 1927

In Memory of John W. Bixby

- o O o -

Purpose: A scientific institution devoted to the growth and study of the native plants of California for their botanical, horticultural and popular features.

- o O o -

MAIL ADDRESS

R. F. D., Anaheim, California

- o O o -

Reissued without change of text, June, 1941